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Website Address: [www.fresnocog.org](http://www.fresnocog.org)

November 22, 2002

Mr. Abhijit Bagde, Senior Transp. Engineer  
Caltrans, Division of Programming MS 82  
Federal Transportation Management Program  
PO Box 942874  
Sacramento, CA 94274-0001

Dear Mr. Bagde:                   **Subject: *Amendment #5 (Formal Amendment) to the FY 2002/03 through 2007/08 Council of Fresno County Governments FTIP***

On November 21, 2002, the Council of Fresno County Governments Policy Board formally adopted Amendment #5 to the *FY 2002/03 through 2007/08 Federal Transportation Improvement Program (FTIP)*. FTIP Amendment #5 amends the *Congestion Mitigation & Air Quality Program* by changing the scope of an existing street sweeper project for the City of Reedley.

Attached is a copy of the Board's Resolution and amendment for your review and approval. We've also attached a copy of the annotated staff report for your reference as well as emission reduction calculations for the replacement street sweeper. We have updated the California Transportation Improvement Program System (CTIPS) to reflect this amendment. If you should have any questions or comments, please feel free to call me or Tony Boren at (559) 233-4148. Thank you for your cooperation.

Sincerely,

RICK BALLANTYNE  
Planning Coordinator  
Council of Fresno County Governments

Attachments (7 Copies to Caltrans, Division of Programming)

cc:

Doug Ito, California Air Resources Board  
Tom Jordan, SJVUAPCD  
Leigh Levine, Federal Highway Administration  
Bob O'Loughlin, Federal Highway Administration  
Paul Page, Federal Transit Administration  
Mark Brucker, Environmental Protection Agency  
Executive Directors, Valley COGs

Karina O'Connor, EPA  
D. Alan McCuen, Caltrans District 06  
Mark Birnbaum, Caltrans District 06  
Steve Curti, Caltrans District 06  
Marvin Johnson, Caltrans District 06  
Dana Ritschel, City of Reedley  
Andrew Benelli, City of Reedley

**Member Agencies:** The cities of Clovis, Coalinga, Firebaugh, Fowler, Fresno, Huron, Kerman, Kingsburg, Mendota, Orange Cove, Parlier, Reedley, San Joaquin, Sanger, Selma & Fresno County

**PUBLIC HEARING: FY 2002-03 thru 2007-08 Federal Transportation Improvement Program, Amendment #5, (Formal Amendment), Resolution 2002-48**

**Summary:** FTIP Amendment # 5 is a City of Reedley request to change the scope of an existing street sweeper project programmed under the *Congestion Mitigation & Air Quality Program* during Fresno COG's TEA-21 2nd Cycle Allocation.

Reedley was originally awarded a PM-10 efficient street sweeper to be fueled by compressed natural gas (CNG). Unfortunately, the cities of Reedley and Orange Cove have natural gas service provided by Southern California Gas rather than by Pacific Gas and Electric. Apparently, the natural gas that comes from Southern California Gas does not meet PUC specifications. This situation has resulted in CNG Internal Combustion Engine Manufacturers refusing to honor engine warranties where non-spec gas is used for fuel. Thus, the City desires to purchase a PM-10 efficient street sweeper fueled with "green" or "bio" diesel fuel rather than CNG to insure that a warranty can be properly obtained.

COG staff performed emission reduction calculations and cost/effectiveness analysis for the "green" diesel fueled street sweeper with similar results as contained within the original CNG proposal. This amendment will not result in any change in programmed amounts. (BALLANTYNE)

**Action:** Staff recommends approval of FTIP Amendment #5 (Formal Amendment) by adopting Resolution 2002-48.

BEFORE THE  
COUNCIL OF FRESNO COUNTY GOVERNMENTS  
RESOLUTION NO. 2002-48

In the Matter of: )  
 )  
**FEDERAL TRANSPORTATION** )  
**IMPROVEMENT PROGRAM** )  
**2002-03 - 2007-08** )  
\_\_\_\_\_ )

RESOLUTION AMENDING THE  
2002-03 FTIP, AMENDMENT #5  
(FORMAL AMENDMENT)  
AMENDS THE CONGESTION  
MITIGATION & AIR QUALITY PROGRAM

WHEREAS, the Council of Fresno County Governments (COFCG) is the designated Regional Transportation Planning Agency (RTPA) and the designated Metropolitan Planning Organization (MPO) for the Fresno County Region; and

WHEREAS, the **2002-03 through 2007-08 Federal Transportation Improvement Program** has been prepared to comply with Federal and State requirements for local projects and is consistent with the Regional Transportation Plan; and

WHEREAS, this Amendment is a request by the City of Reedley to change the scope of an existing street sweeper project programmed under the Congestion Mitigation & Air Quality Program; and

WHEREAS, the Federal Highway Administration has provided guidance that projects submitted in the TIP be demonstrated as reasonable requests when compared to available funding and we can affirm that funding is available; and

WHEREAS, the COFCG process for TIP project selection is currently serving as the MPO's formal Project Selection Process as required under TEA 21 and is consistent with the outlined guidance; and

WHEREAS, this Amendment has been through a public participation process by being circulated and reviewed by the Council of Fresno County Governments' member agencies representing their technical and management staffs; representatives of other governmental agencies, including State and Federal; representatives of special interest groups; representatives of the private business sector, and residents of Fresno County; and

WHEREAS, the project contained in this amendment has no effect on the air quality conformity analysis or funding.

NOW THEREFORE BE IT RESOLVED, that the **Council of Fresno County Governments hereby amends the 2002-03 through 2007-08 Federal Transportation Improvement Program reflecting the project shown in the attached exhibit.**

THE FOREGOING RESOLUTION was passed and adopted by the Council of Fresno County Governments this 21st day of November, 2002.

AYES: Clovis, Firebaugh, Fowler, Fresno, Kingsburg, Mendota, Orange Cove, Reedley, San Joaquin, Selma &


NOES: Fresno County

ABSTAIN: None

ABSENT: Coalinga, Huron, Kerman, Parlier, and Sanger

ATTEST

Signed:

  
Dennis Lujan, Vice Chairman

I hereby certify that the foregoing is a true copy of a resolution of the Council of Fresno County Governments duly adopted at a regular meeting thereof held on the 21st day of November, 2002.

Signed Barbara Goodwin  
Barbara Goodwin, Executive Director

# PROGRAM: CONGESTION MITIGATION/AIR QUALITY PROGRAM - STREETS/HIGHWAYS

MPO ID# Rt/Postmile: ADA/TCM Benefits: Fund: AQ:	Project Description	Status:	Phase	Prior Year(s)*	Program Schedule (Costs escalated as per State %s) (\$ in thousands)					Funding Source		
					[ Triennial Element ]					Local**	State	Federal
					02-03	03-04	04-05	05-06	06-07	07-08		
LEAD:	Total Escalated Cost:											
FRE020161	(Previously FRE000149)											
CNG Fuel Station	Construct New CNG Fueling Station To Serve School District Buses	In Progress	PE	40.0							4.6	35.4
No/No			RW		360.0						41.3	318.7
CMAQ/Local			Const									
Non-Exempt												
Fresno USD	TEC = 400,000		Total	40.0	360.0						45.9	354.1
FRE020162	(Previously FRE000151)											
L/CNG Fuel Station	Construct New Liquefied/Natural Gas (L/CNG) Fueling Station To Serve School District Buses	In Progress	PE	64.1							7.4	56.7
No/No			RW									
CMAQ/Local			Const		576.6						66.1	510.5
Non-Exempt												
SW Transport	TEC = 640,682		Total	64.1	576.6						73.5	567.2
FRE020163	(Previously FRE000146)											
State Routes 168 & 180	To Expand the Existing Freeway Service Patrol to Serve Additional Segments of State Routes 168 and 180 (One Additional Beat)	NEW	Operations		69.8						1.6	55.8
No/Yes (TF)			Operations			69.8					1.6	55.8
CMAQ/SHA/Local			Operations				69.8				1.6	55.8
Non-Exempt												
COFCG	TEC = 209,400		Total		69.8	69.8	69.8				4.8	167.4
FRE020164	<b>Amendment #5 (Formal Amendment)</b>											
Purchase CNG Street Sweeper	(Previously FRE000131)		Purchase	150.0							29.8	140
No/No	Replace City's Older Diesel Street Sweeper With A Green Diesel Fueled Street Sweeper	In Progress										106.2
CMAQ/Local												
4.03	MODIFICATION (See Italics)											
Reedley	TEC = 150,000		Total	150.0							29.8	140
												106.2

Notes: \*Prior years dollars reflect obligated amounts. \*\*All CMAQ projects requiring local match may be eligible for Regional Choice Matching Funds to the extent of available funding. Regional Choice Matching Funds are programmed in \$1,000 increments. This may result in the State Match exceeding 11.47% or a Local Match required.



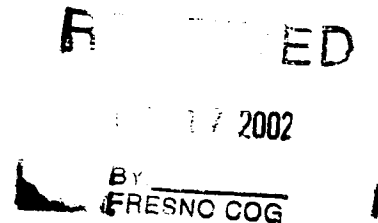
## City of Reedley

Public Works Engineering  
1733 Ninth Street  
Reedley, CA 93654  
(559) 637-4200  
FAX 637-2139

Fresno County Council of Governments  
2100 Tulare Street, Suite 619  
Fresno, CA 93721

October 15, 2002

Re: FTIP Amendment for CML-5216(016)



Dear Mr. Ballantyne:

The City of Reedley respectfully requests that COG prepare and process a FTIP amendment regarding a change in scope (operational fuel type) with respect to the purchase of a street sweeper, project number CML-5216(016). As you know, the City cannot use the CNG sweeper originally specified because of the high sulfur content in the natural gas available in this area. The current FTIP calls for the purchase of the CNG unit and needs to be modified to allow for the purchase of the green diesel unit. Colby is preparing a memo and calculations regarding the emissions reduction aspect of this request.

If you have any questions or if there is anything else I can do to move this forward please feel free to call me at 637-4200 ext 277.

Sincerely,

Dana R Ritschel  
Sr. Engineering Assistant

Enc. 1

**COUNCIL OF FRESNO COUNTY GOVERNMENTS  
MEMORANDUM**

**TO:** REEDLEY CMAQ FILE  
**FROM:** COLBY MORROW, PLANNING COORDINATOR  
**SUBJECT:** REEDLEY TEA-21 CYCLE 2 COMPETITIVE BID STREET SWEEPER PROJECT  
**DATE:** OCTOBER 15, 2002  
**CC:** RICK BALLANTYNE, JASON PAUKOVITS

This memo and the attached spreadsheet printout provides documentation of the emission reductions for the Reedley PM10 efficient street sweeper project.

This project was originally awarded through the Fresno COG competitive bid portion of our TEA-21 Cycle 2 allocation. Reedley proposed the project as a PM10 efficient street sweeper to be fueled by compressed natural gas (CNG). Fresno COG calculated emission reductions for the project both for the PM10 emissions reduction replacing an old broom type sweeper with the regenerative street sweeper and for the use of the CNG alternative fuel versus regular diesel #2 fuel.

Unfortunately, the City of Reedley does not have service of Public Utilities Commission quality CNG. Unlike most of Fresno County, both Reedley and Orange Cove have natural gas service from Southern California Gas rather than from Pacific Gas and Electric. Apparently, the natural gas from So Cal Gas does not meet the PUC specifications. This results in CNG internal combustion engine manufacturers refusing to honor engine warranty if one uses the non-spec gas for fuel. Thus, the City would have no warranty for the street sweeper purchased with the CMAQ funding. Reedley staff stated that this is not an acceptable condition for purchase and COG staff concurred. Therefore, Reedley is proposing to purchase a PM10 efficient street sweeper and they plan to fuel it with "green" or "bio" diesel fuel. The project always qualified for CMAQ funding just from the PM10 reduction potential of replacing an inefficient broom street sweeper with a PM10 efficient regenerative type of sweeper. The proposal for using alternative fuel just added 161 pounds of oxides of nitrogen (NOx) to the emission reductions. The PM10 emission reductions remain at 9,256 pounds per year.

In summary, while the emissions reduction potential of the Reedley street sweeper project is lower than those reductions of the original proposal, the project is still very cost effective as demonstrated by the attached emission reduction calculations.

# City of Reedley

## Street Sweeper Project

### CMAQ Emission Reduction Calculations

Street Sweeper

Regenerative air - closed system

LIFE	12
Annual VMT	24,375
Annual VMT/1,000	24.38
EMF (lbs PM10/1000 VMT)	825.5
Annual PM10 (lbs)	20,122
Annual PM10 (tons)	10.06
LIFE EMISSIONS -PM10 (lbs)	241,459
LIFE EMISSIONS-PM10 (tons)	120.7
*EFFICIENCY REDUCTION 46% (tons)	65.2
PM10 BEFORE - LIFE (lbs)	241,459
PM10 AFTER - LIFE (lbs)	130,388
PROJ TOTAL EMR (lbs/Proj Life)	111,071
EMR-PM10 (Kg/day)	11.50
Average Annual Emission (lbs)	9,256
Total Project Cost	\$160,400
Local Match	\$40,200
State funding (COG STIP CMAQ reserve)	\$14,000
CMAQ Cost	\$106,200
Capital Recovery Factor	0.11
Annulized Cost	\$17,644.00
Cost Effectiveness (\$/lb)	\$1.91

**Notes:**

1. These reductions apply to regenerative air or closed system sweepers only such as Tymco and Elgin Crosswind.
2. Closed system sweeper will reduce PM10 by 46%. Mike Bitner personal communication with Tom Jordan. SJVUAPCD
3. Cost figures updated 10/15/02 using information from Rick Ballantyne